

July 07, 2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Richland

2800 George Washington Way

Richland, WA 99352

Tel: (509)375-3131

TestAmerica Job ID: 300-3224-1

TestAmerica Sample Delivery Group: WC1138

Client Project/Site: S16-006

For:

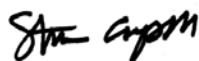
CH2M Hill Plateau Remediation Company

PO BOX 1600

Mail Stop R3-50

Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:

7/7/2016 2:26:13 PM

Steven Campbell, Project Mgmt. Assistant

steven.campbell@testamericainc.com

Designee for

Whitney Ritari, Project Manager I

(509)375-3131 ext164

whitney.ritari@testamericainc.com

LINKS

Review your project
results through

TotalAccess

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I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed in this package. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the attached signature.

The laboratory is accredited to EPA 7196A in Solid and Chemical Materials, per Washington State Department of Ecology this is approved for non-discharge water samples. The sample/ sample duplicate RPD agreement is not applicable if one or both results are less than five times the MDL.



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Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
U	Analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Job ID: 300-3224-1

Laboratory: TestAmerica Richland

Narrative

**Job Narrative
300-3224-1**

Comments

No additional comments.

Receipt

The samples were received on 6/7/2016 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.6° C.

HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

3224
WCE 1134

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#

S16-006-544

Page 1 of 1

Collector	KC. Patterson/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-006	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, JUNE 2016	Logbook No.	HNF-N-506 <u>83 / 83</u>	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	SURV	Priority:	30 Days	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS		Hold Time	
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		N/A		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Sample No.	Filter	*	Date	Time	No/Type Container
Sample Analysis					
B35D34	N	WJUN 07 2016	0801	1x60-mL aG	7196_CR6: COMMON
Holding Time				Preservative	
24 Hours				Cool <=6C	

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
K.C. Patterson Center			JUN 07 2016 0850	Lesly Wall K.C. Center			JUN 07 2016 0850	
Relinquished By			Date/Time	Received By			Date/Time	
Lesly Wall K.C. Center			JUN 07 2016 1450	Lesly Wall			JUN 07 2016 1450	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION			Disposal Method (e.g., Return to customer, per lab procedure, used in process)					
Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By					Date/Time

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
S16-006-533
Page 1 of 1

Collector Dan Woeshle CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. S16-006	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071
Project Title SURV, JUNE 2016	Logbook No. HNF-N-506 <u>86/14</u>	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Protocol SURV	Priority: 30 Days	Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS N/A
Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B36D07	N	W	6.6.16	1353	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

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Relinquished By Dan Woeshle CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUN 06 2016 1430	Received By SSU-1	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUN 06 2016 1430	Matrix *
Relinquished By SSU-1			Date/Time JUN 07 2016 0900	Received By Lesly West CHPRC	<i>[Signature]</i>		Date/Time JUN 07 2016 0900	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By Lesly West CHPRC	<i>[Signature]</i>		Date/Time JUN 07 2016 1450	Received By J. Bock, TARL			Date/Time JUN 07 2016 1450	DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By Date/Time

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #


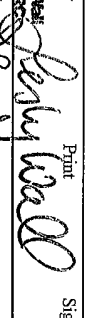
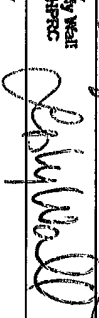

S16-006-543

Page 1 of 1

Collector K.C. Patterson/CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. S16-006	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071
Project Title SURV, JUNE 2016	Logbook No. HNF-N-506 83/83	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Protocol SURV	Priority: 30 Days	Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS N/A
Sample No. B35D33	Filter N	Date JUN 07 2016 0801
No/Type Container 1x500-mL P	Sample Analysis 300.0_ANIONS_IC: COMMON	Holding Time 48 Hours
Preservative Cool <=6C		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

July 07, 2016

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wce1138

Relinquished By K.C. Patterson/CHPRC	Print 	Sign K.C. Patterson	Date/Time JUN 07 2016 0850	Received By Lesly Wall	Print 	Sign Lesly Wall	Date/Time JUN 07 2016 0850	Matrix *
Relinquished By Lesly Wall	Print 	Sign Lesly Wall	Date/Time JUN 07 2016 1450	Received By Lesly Wall	Print 	Sign Lesly Wall	Date/Time JUN 07 2016 1450	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	

PRINTED ON 4/28/2016

FSR ID = FSR31691

A-6004-842 (REV 2)

July 07, 2016 Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Client Sample ID: B35CX8

Lab Sample ID: 300-3224-1

No Detections.

Client Sample ID: B35D34

Lab Sample ID: 300-3224-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.017		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B35D07

Lab Sample ID: 300-3224-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	2.5	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.38	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	23	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B35D03

Lab Sample ID: 300-3224-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.0	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	7.0	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.43	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	15	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

July 07, 2016 Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Client Sample ID: B35CX8

Date Collected: 06/07/16 09:31

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			06/07/16 16:11	1

Client Sample ID: B35D34

Date Collected: 06/07/16 08:01

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-2

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.017		0.0040	0.0015	mg/L			06/07/16 16:12	1

Client Sample ID: B35D07

Date Collected: 06/06/16 13:53

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20	D	0.40	0.20	mg/L			06/07/16 17:32	2
Nitrate as N	2.5	D	0.056	0.028	mg/L			06/07/16 17:32	2
Fluoride	0.38	D	0.10	0.050	mg/L			06/07/16 17:32	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			06/07/16 17:32	2
Sulfate	23	D	0.50	0.25	mg/L			06/07/16 17:32	2

Client Sample ID: B35D33

Date Collected: 06/07/16 08:01

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.0	D	0.40	0.20	mg/L			06/07/16 18:18	2
Nitrate as N	7.0	D	0.056	0.028	mg/L			06/07/16 18:18	2
Fluoride	0.43	D	0.10	0.050	mg/L			06/07/16 18:18	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			06/07/16 18:18	2
Sulfate	15	D	0.50	0.25	mg/L			06/07/16 18:18	2

July 07, 2016 QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-4440/5

Matrix: Water

Analysis Batch: 4440

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.014	U	0.028	0.014	mg/L			06/07/16 17:02	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			06/07/16 17:02	1

Lab Sample ID: LCS 300-4440/6

Matrix: Water

Analysis Batch: 4440

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.26	2.29		mg/L		102	80 - 120
Nitrite as N	3.04	3.12		mg/L		102	80 - 120

Lab Sample ID: 300-3224-3 MS

Matrix: Water

Analysis Batch: 4440

Client Sample ID: B35D07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.5	D	0.452	2.91	D	mg/L		93	75 - 125
Nitrite as N	0.038	U D	0.609	0.517	D	mg/L		85	75 - 125

Lab Sample ID: 300-3224-3 DU

Matrix: Water

Analysis Batch: 4440

Client Sample ID: B35D07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Nitrate as N	2.5	D	2.46	D	mg/L		1	20
Nitrite as N	0.038	U D	0.038	U D	mg/L		NC	20

Lab Sample ID: MB 300-4441/5

Matrix: Water

Analysis Batch: 4441

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.10	U	0.20	0.10	mg/L			06/07/16 17:02	1
Fluoride	0.025	U	0.050	0.025	mg/L			06/07/16 17:02	1
Sulfate	0.13	U	0.25	0.13	mg/L			06/07/16 17:02	1

Lab Sample ID: LCS 300-4441/6

Matrix: Water

Analysis Batch: 4441

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16.0	16.0		mg/L		100	80 - 120
Fluoride	4.00	4.01		mg/L		100	80 - 120
Sulfate	20.0	20.1		mg/L		100	80 - 120

TestAmerica Richland

July 07, 2016 QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-3224-3 MS

Matrix: Water

Analysis Batch: 4441

Client Sample ID: B35D07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20	D	3.20	23.1	D	mg/L		87	75 - 125
Fluoride	0.38	D	0.800	1.13	D	mg/L		94	75 - 125
Sulfate	23	D	4.00	26.6	D	mg/L		92	75 - 125

Lab Sample ID: 300-3224-3 DU

Matrix: Water

Analysis Batch: 4441

Client Sample ID: B35D07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	20	D	20.1	D	mg/L		1	20
Fluoride	0.38	D	0.376	D	mg/L		1	20
Sulfate	23	D	22.6	D	mg/L		1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-4458/3

Matrix: Water

Analysis Batch: 4458

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			06/07/16 16:08	1

Lab Sample ID: LCS 300-4458/4

Matrix: Water

Analysis Batch: 4458

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.249		mg/L		100	80 - 120

Lab Sample ID: 300-3224-1 MS

Matrix: Water

Analysis Batch: 4458

Client Sample ID: B35CX8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0015	U	0.0499	0.0445		mg/L		89	75 - 125

Lab Sample ID: 300-3224-1 DU

Matrix: Water

Analysis Batch: 4458

Client Sample ID: B35CX8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.0015	U	0.0015	U	mg/L		NC	20

TestAmerica Richland

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

HPLC/IC

Analysis Batch: 4440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3224-3	B35D07	Total/NA	Water	300.0	
300-3224-3 DU	B35D07	Total/NA	Water	300.0	
300-3224-3 MS	B35D07	Total/NA	Water	300.0	
300-3224-4	B35D33	Total/NA	Water	300.0	
LCS 300-4440/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-4440/5	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 4441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3224-3	B35D07	Total/NA	Water	300.0	
300-3224-3 DU	B35D07	Total/NA	Water	300.0	
300-3224-3 MS	B35D07	Total/NA	Water	300.0	
300-3224-4	B35D33	Total/NA	Water	300.0	
LCS 300-4441/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-4441/5	Method Blank	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 4458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3224-1	B35CX8	Total/NA	Water	7196A	
300-3224-1 DU	B35CX8	Total/NA	Water	7196A	
300-3224-1 MS	B35CX8	Total/NA	Water	7196A	
300-3224-2	B35D34	Total/NA	Water	7196A	
LCS 300-4458/4	Lab Control Sample	Total/NA	Water	7196A	
MB 300-4458/3	Method Blank	Total/NA	Water	7196A	

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Client Sample ID: B35CX8

Date Collected: 06/07/16 09:31

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			4458	06/07/16 16:11	RLC	TAL RCH

Client Sample ID: B35D34

Date Collected: 06/07/16 08:01

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			4458	06/07/16 16:12	RLC	TAL RCH

Client Sample ID: B35D07

Date Collected: 06/06/16 13:53

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		4440	06/07/16 17:32	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		4441	06/07/16 17:32	CPM	TAL RCH

Client Sample ID: B35D33

Date Collected: 06/07/16 08:01

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		4440	06/07/16 18:18	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		4441	06/07/16 18:18	CPM	TAL RCH

Client Sample ID: B35CX8

Date Collected: 06/07/16 09:31

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-1 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			4458	06/07/16 16:11	RLC	TAL RCH

Client Sample ID: B35D07

Date Collected: 06/06/16 13:53

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-3 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		4440	06/07/16 18:03	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		4441	06/07/16 18:03	CPM	TAL RCH

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-4440/6

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		4440	06/07/16 17:17	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-4441/6

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		4441	06/07/16 17:17	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-4458/4

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			4458	06/07/16 16:08	RLC	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-4440/5

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		4440	06/07/16 17:02	CPM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-4441/5

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		4441	06/07/16 17:02	CPM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-4458/3

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			4458	06/07/16 16:08	RLC	TAL RCH

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Client Sample ID: B35CX8

Date Collected: 06/07/16 09:31

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-1 MS

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1		3.0 mL	4458	06/07/16 16:08	RLC	TAL RCH

Client Sample ID: B35D07

Date Collected: 06/06/16 13:53

Date Received: 06/07/16 14:50

Lab Sample ID: 300-3224-3 MS

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		4440	06/07/16 17:48	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		4441	06/07/16 17:48	CPM	TAL RCH

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL RCH
7196A	Chromium, Hexavalent	SW846	TAL RCH

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

July 07, 2016
Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-006

TestAmerica Job ID: 300-3224-1
SDG: WC1138

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-3224-1	B35CX8	Water	06/07/16 09:31	06/07/16 14:50
300-3224-2	B35D34	Water	06/07/16 08:01	06/07/16 14:50
300-3224-3	B35D07	Water	06/06/16 13:53	06/07/16 14:50
300-3224-4	B35D33	Water	06/07/16 08:01	06/07/16 14:50

July 07, 2016

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-3224-1

SDG Number: WC1138

Login Number: 3224

List Number: 1

Creator: Bock, Julie A

List Source: TestAmerica Richland

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	